

Impact of financial literacy in optimising financial inclusion in rural South Africa

Case study of the Eastern Cape Province

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Introduction

- About 37% of South Africa's adults did not have access to banking services in 2010
- and the majority of informal businesses have limited access to formal financing, (OECD, 2012).

Definitions:

- Financial Inclusion is the delivery of banking services at **affordable costs** to **disadvantaged and low income groups** including households, enterprises, SMEs and traders; Pawar, Kumar, Joshi & Chawla (2011)
- CFI defines financial inclusion as a state in which all people have access to a full suite of **quality** financial services, provided at **affordable prices**, in a **convenient manner**, and with **dignity for the clients**.

Cont....

- Types of financial exclusion include
 - (i) exclusion from payment system
 - (ii) exclusion from formal credit markets

Exclusion may be due to:

- Unbearable costs
- Lack of know how

Cont.....

- Gardeva and Rhyne (2011)- CFI expands its definition to note that full inclusion requires the clients of these services to be *financially literate*.
- Financial inclusion definition that have been adopted in most cases lack the component of financial literacy.
- Financial literacy is thought to enable **unlocking of other dimensions of financial inclusion e.g. prevention of over indebtedness**

- Access and use of services needs:
 - Understanding and independence for consumers

Strategies employed by financial institutions to enhance financial inclusion in South Africa.



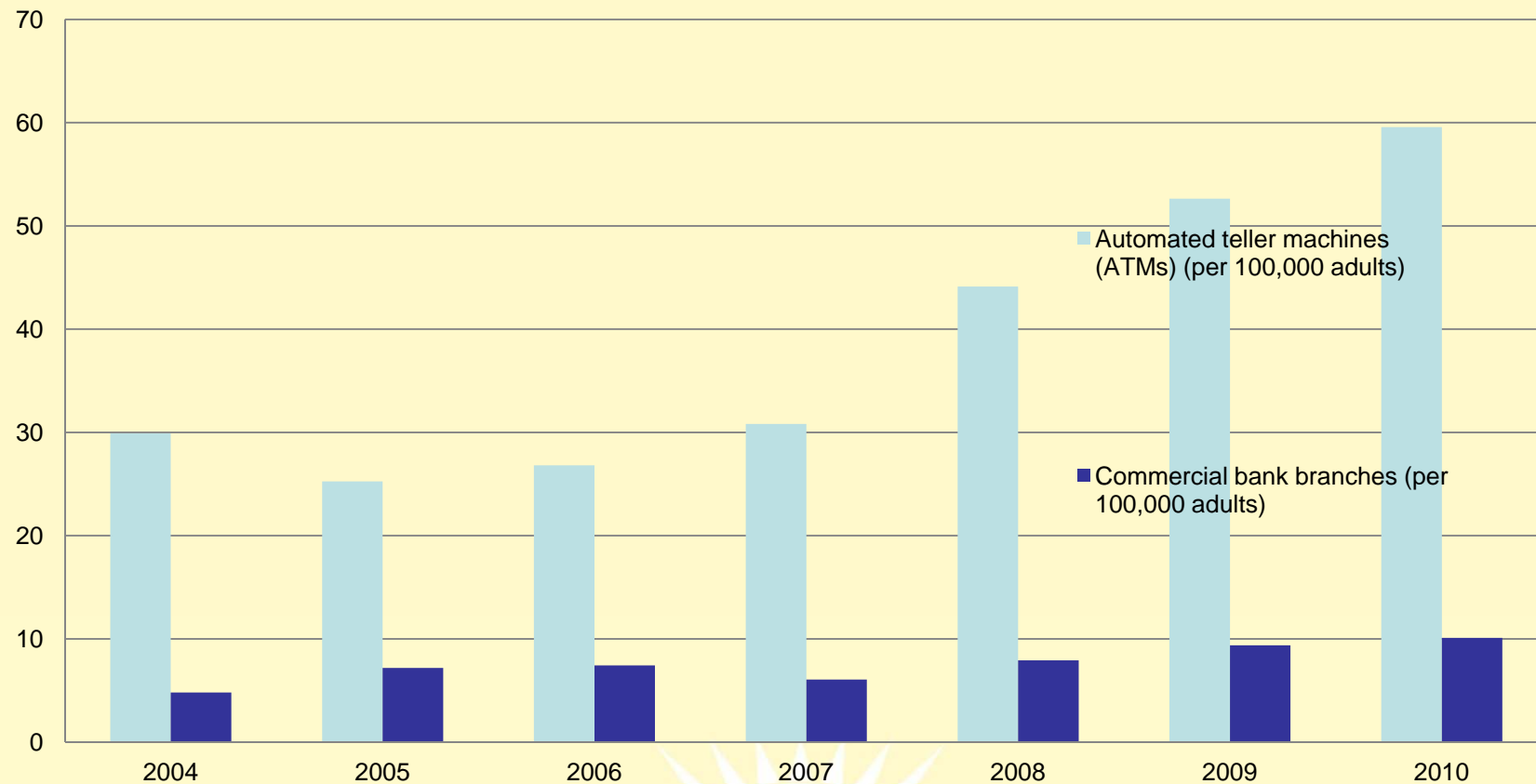
- **consumer education** -social responsibility, and marketing strategy -most banks look back to the unbanked populace for growth and sustainability.
 - Financial literacy programs such as:
 - **Be Financially Smart** administered by FNB;
 - **Bubomi** governed by ABSA
 - **Teach Children to Save SA**
 - **Junior Achievement SA**
 - **VISA Fin. Literacy drama.**



- **Innovations** to expand access to banking, thus enhancing financial inclusion include:
 - domestic money transfer systems.
 - payment via prepaid cards.
 - using community banking mobile banking account
 - M-Pesa
- **Increase in infrastructure-** ATMs, bank branches
 - Financial inclusion may also be thought to involve **access to the financial infrastructure** by all the population groups and ages.

Figure 6: Financial Infrastructure development

Financial Infrastructure in South Africa



Cont...



- Although there are noticeable efforts for financial inclusion in South Africa, the question still remains: **can financial literacy programmes be utilized in optimizing financial inclusion?**





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Year and Author	Arguments	Conclusions; take home
Leeladhar (2005)	identified three priority areas for the purpose of financial inclusion	access to banking, access to affordable credit and access to free face-to-face money advice
Sarma and Pais (2008)	Data for 49 countries was used and three basic dimensions of financial inclusion – accessibility, availability and usage of banking services were utilized	income inequality, adult literacy and urbanisation- important factors in explaining financial inclusion
Oseifuang (2010)	studied the level of financial literacy and its impact on youth entrepreneurship in South Africa (Vhembe District)	level of financial literacy among youth entrepreneurs in Vhembe District is above average
Sarma (2010)	while the importance of financial inclusion is widely recognized, the literature lacks a comprehensive measure that can be used to measure the extent of financial inclusion across economies	multidimensional index of financial inclusion (IFI)



Year and Author	Arguments		Conclusions; take home
Kudva (2012)	financial inclusion initiatives give people access to organized financial services, the lack of knowledge has resulted in sub-optimal impact in using this opportunity and in some cases proven counterproductive with the creation of debt traps.	financial inclusion and financial literacy form two sides of a coin with inclusion activities giving the push and literacy programmes creating the pull for financial services	financial literacy programmes need to go hand-in-hand with financial inclusion initiatives to create the pull for accessing formal channels of finance
Sajeev and Thangavel (2012)	impact of Self Helping Groups (SHG) on financial inclusion		study indicates that financial education can enhance the link between SHG banking and Financial inclusion



Based on literature reviewed, several factors have been identified as central to financial inclusion



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Methodology and Estimation Techniques



- The study employs **quantile** and **OLS** regression, influenced by the works of Koenker and Bassett (1978), Chen (2005); and Sangwan (2008) respectively.
- The key variables in the model are **financial inclusion** and **financial literacy**.



Methodology and Estimation Techniques Cont.



- **Quantile regression:**

$$Z = \alpha + \beta X + \varepsilon$$

- Measuring the effect of financial literacy, X , on financial inclusion, Z .
- Z represents the percentage of account holders (number of account holders per hundred people)
- Higher percentiles of Z represent the areas where this number is high, while the lower percentiles represent states where the number of accounts holders per hundred people is low.



Methodology and Estimation Techniques Cont.



- **Ordinary regression:**
- model takes the following form:

$$Z = \alpha + \beta_1 X_1 + \beta_2 P + \beta_3 O + \epsilon$$

- Where Z= financial inclusion measure, percentage of individuals with bank account; X- financial literacy measure; P= per capita income; O= set of control variables, ϵ is the error term.



Discussion of data and variables



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- South African Labour and Development Research Unit-2008 National Income Dynamics Study (NIDS) data is used to examine access to banks in South Africa.
- For the purposes of this paper, the analysis is based on adults who have bank accounts.

Discussion of data and variables

Cont.



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- **Financial Inclusion:**
- The data was obtained from Eastern Cape Socio-Economic Consultative Council; NIDS wave 1 2008; individual bank websites; IMF and World Bank databank.

bankaccess	Freq.	Percent	Cum.
1	4,980	31.96	31.96
2	10,601	68.04	100.00
Total	15,581	100.00	

Discussion of data and variables

Cont.



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- **Financial Literacy** -defined as familiarity with/understanding of financial market products, rewards, risks & make informed decisions.
- Ability to grow, monitor, effectively use financial resources for economic security of self, family & business.

Discussion of data and variables

Cont.



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- **Literacy rate:** two variables will be used to measure the literacy rate.
 - 1). Ability to manage money by the adult,
 - 2). Ability of the adult to read English- Respondent's reading level in English was used as the second proxy for literacy level.

Trends in financial literacy levels in Eastern cape



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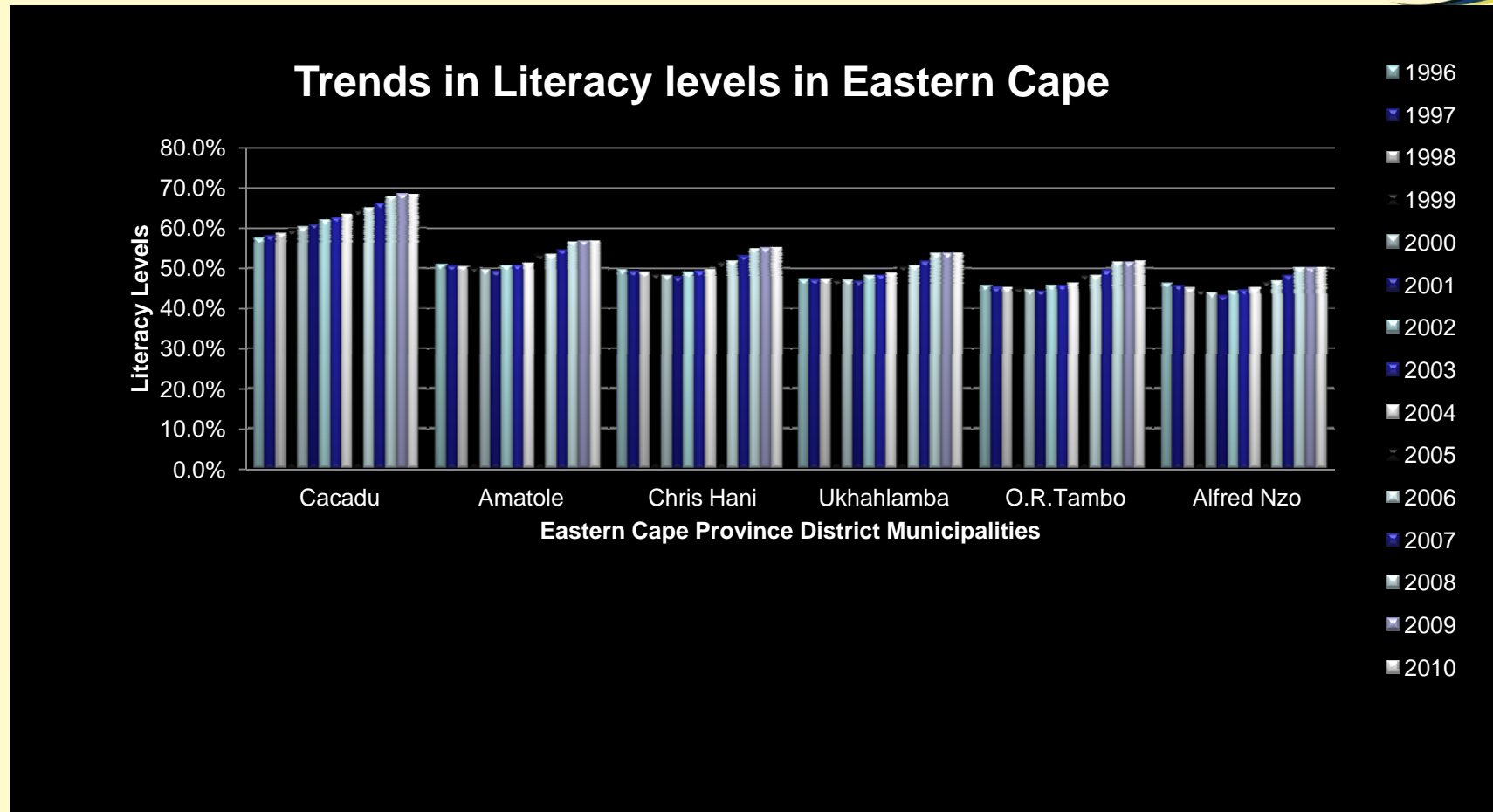
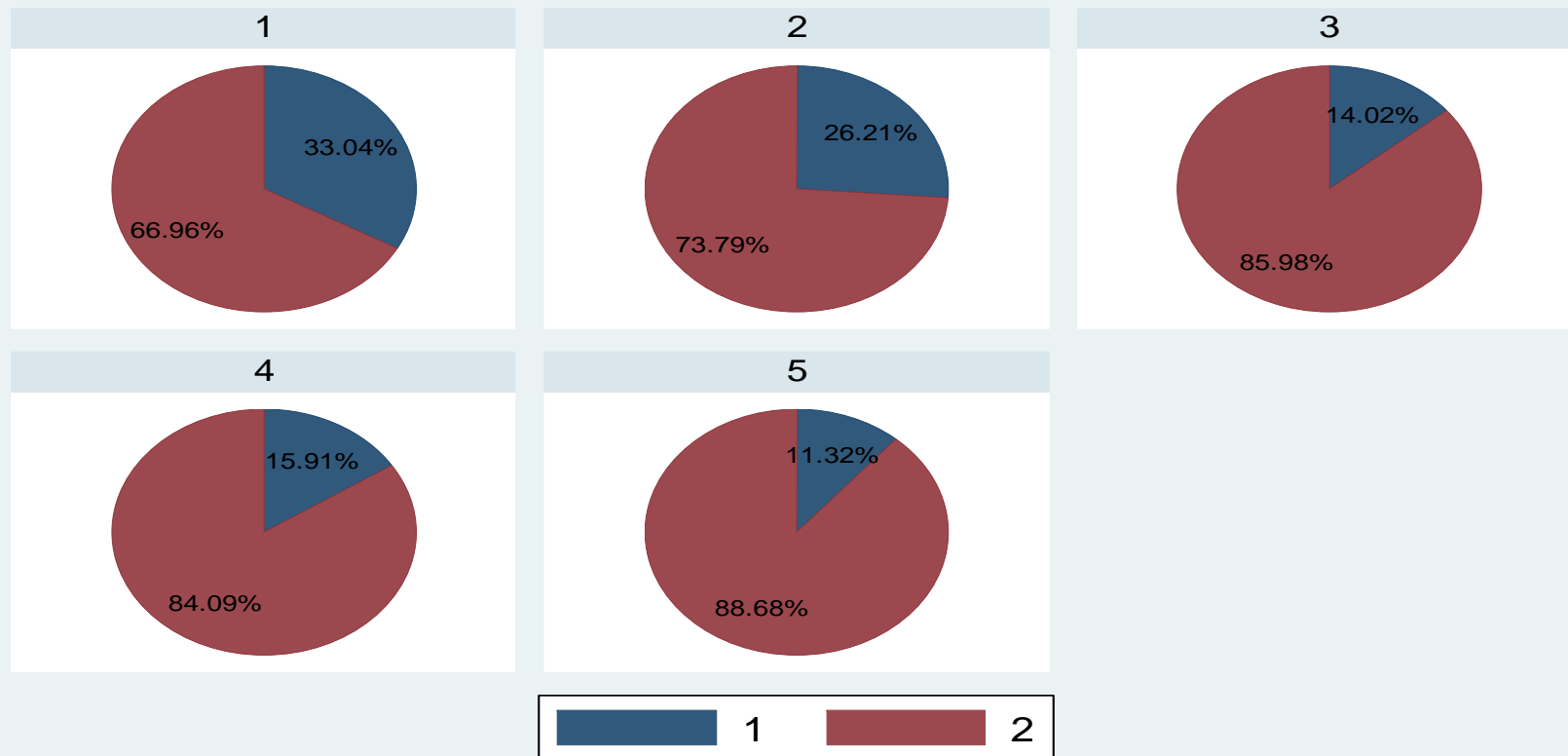


Figure 2: Literacy level and access to Banks in South Africa



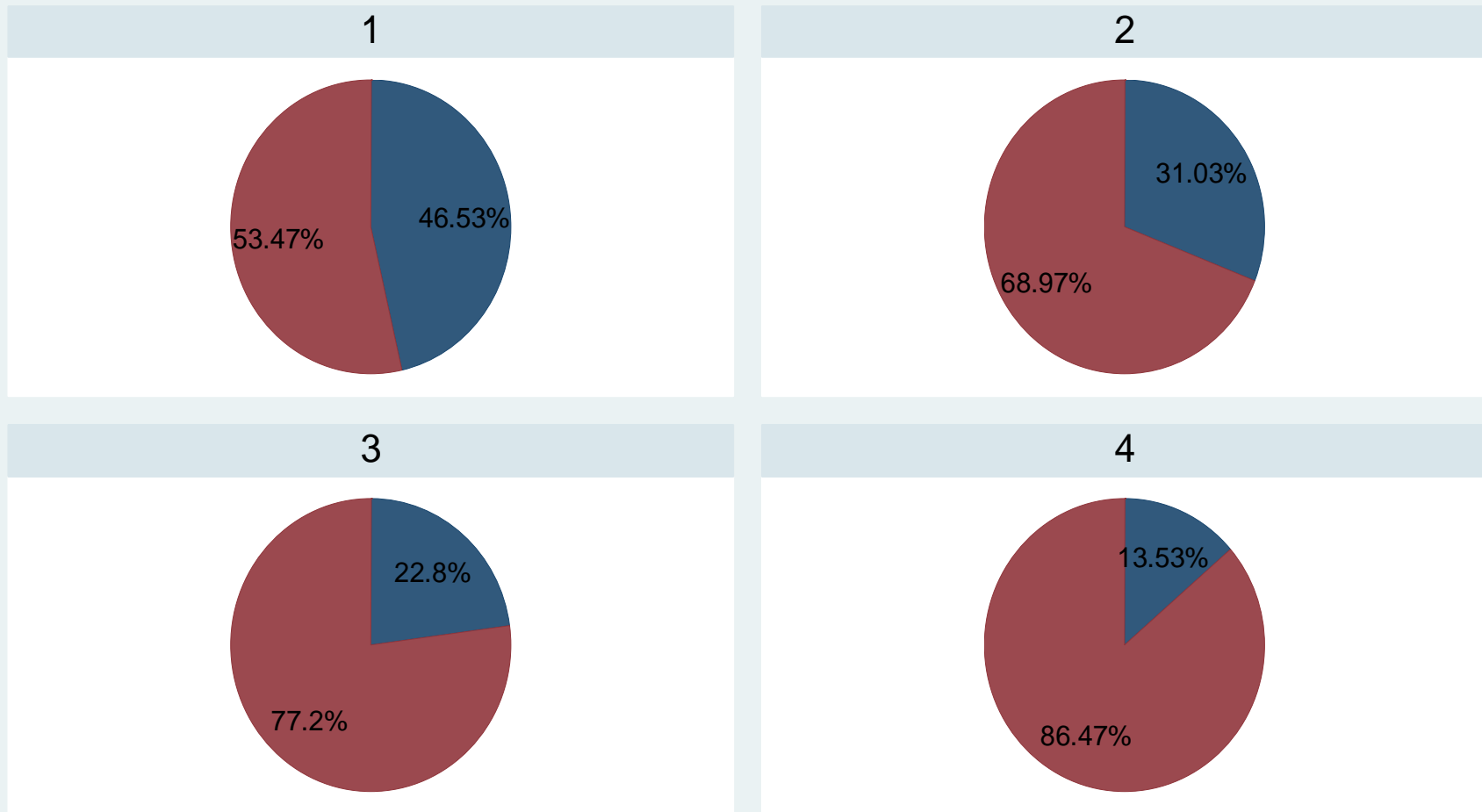
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Ability to Manage Money and Bank Access in South Africa



Ability to manage money as a proxy for Literacy level
South African Household Data: NIDS SURVEY 2008

Ability to Read in English and Bank Access in South Africa



Ability to read in english as a proxy for Literacy level

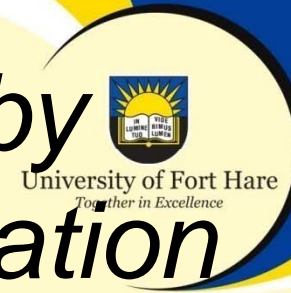
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African Development Finance

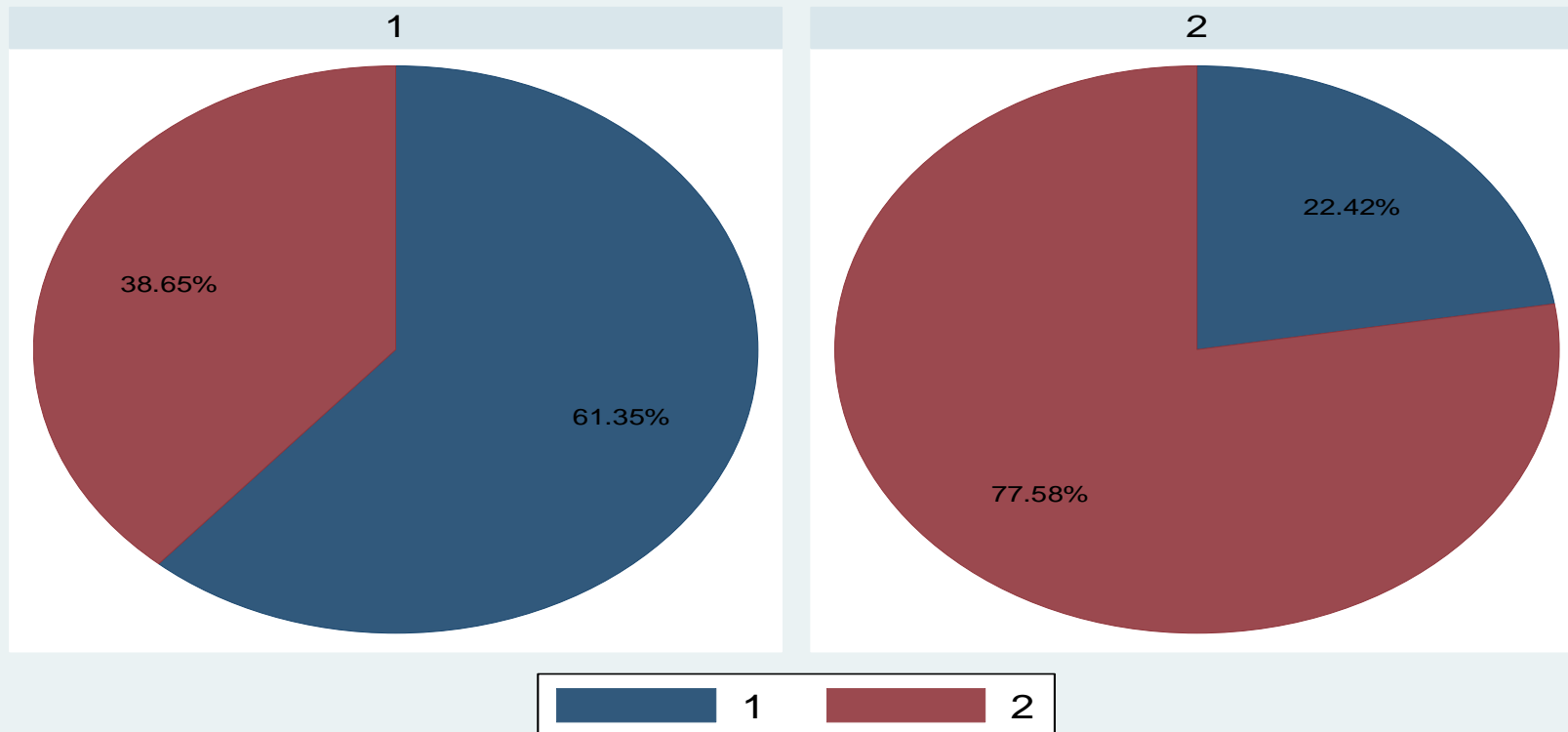
Workshop, USB, RSA, 7-8 August



Figure 5: Access to Banks by Employment status and Population group



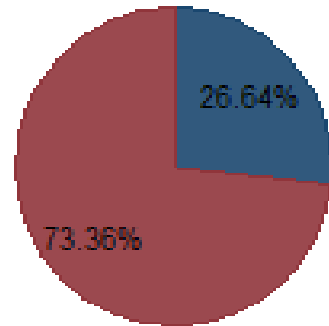
Access to Bank by Employment status



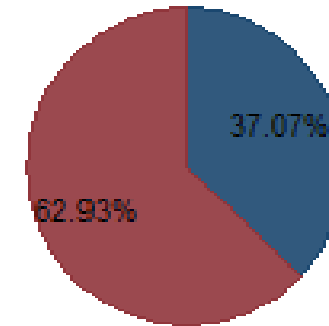
Graphs by RECODE of w1_a_e1 (e1 - Employment status)
Source: South African Household Survey Data: NIDS Wave1 2008
African Development Finance Workshop, USB, RSA, 7-8 August

Access to Bank by Population Group

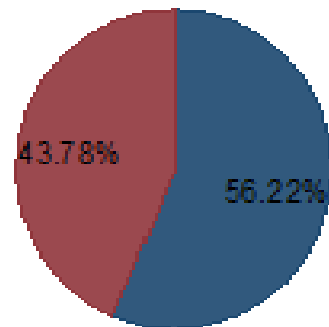
1. African



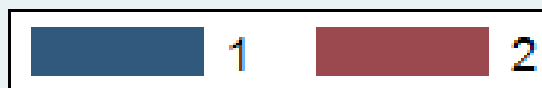
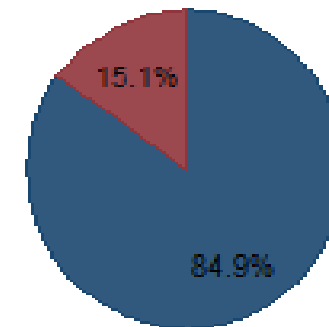
2. Coloured



3. Asian_Indian



4. White



Graphs by Best race

Source: South African Household Survey Data: NIDS Wave1 2008

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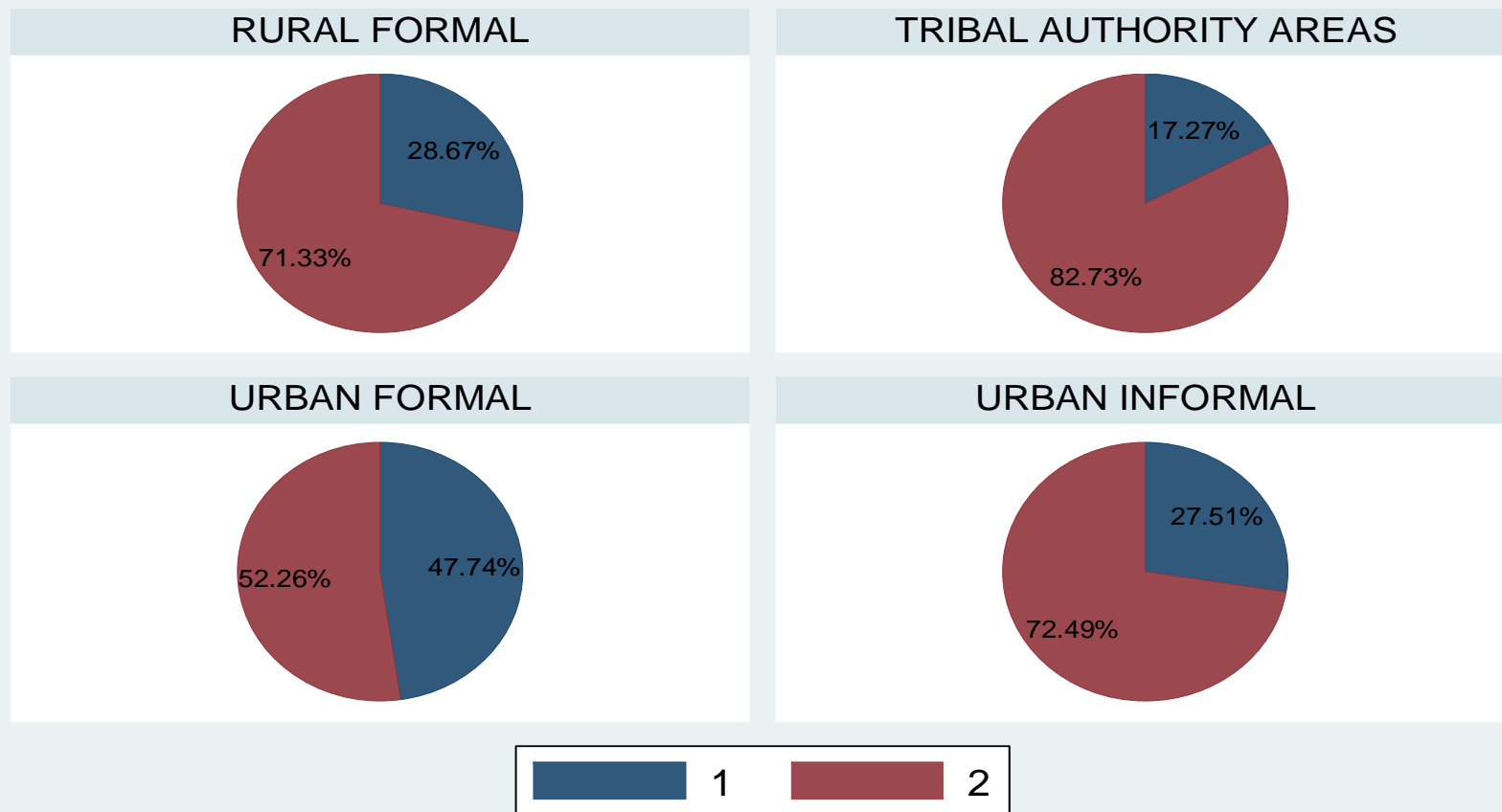
- Bringing financial services to rural clients is one of the biggest challenges in the quest for broad-based financial inclusion.

Figure 3: Access to banks by location



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Access to Bank by Geographical Location



Graphs by Geo-type

Source: South African Household Survey Data: NIDS Wave1 2008

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Results and Discussion



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Percentile	.10	.20	.30	.40	.50	.60	.70	.80	.90	.95
Coef.	.2349339	.4452735	.4475134	.6321857	.400192	.4615741	.4221021	.7533334	1.314768	1.49052
p-value	.229	.023	.054	.010	.208	.092	.337	.229	.000	.000

The values of α_1 are positive and increased as the percentile increase.

there is significant positive effect of literacy percentage on the 90th and 95th percentiles of the conditional distribution of access to bank through bank accounts per 100 people given the literacy rate.



- If the different areas are ranked with similar literacy percentage, in increasing order of the number of accounts per 100 people, then:
 - if a district is among the top 10 percent in that list, an increase in literacy percentage can help further improve the financial inclusion in that district (local municipality).
 - Deductively, increase in literacy percentage does not necessarily imply significant improvement in financial inclusion in every district, especially if not part of the top 10 percent districts in terms of access to finance (i.e. financial inclusion).

Model	Dependent Variable	Constant	Income	Literacy1	Literacy2	Education	R ²
1.	Bank Account	2.027 (0.000)	-.143 (0.000)	.052 (0.000)	-	-.000 (0.313)	0.18
2.	Bank Account	1.901 (0.000)	-.127 (0.000)	-	.078 (0.000)	-.003 (0.000)	0.21
3.	Bank Account	1.869 (0.000)	-.112 (0.000)	.043 (0.000)	.107 (0.000)	-.001 (0.001)	0.23

Literacy1, being the ability of one to manage money, and thus a better measure for financial literacy will increase access to banks by 5% per unit increase in the measure of the literacy levels. The second measure for literacy, literacy2- the ability to read in English, which can be associated with better education, has a higher impact or about 8%.

- Contrary to literature, per capita income and level of education has a negative effect on access to bank. The results further indicate that, both literacy measures explain access to banks better, 23 %.

Part 2: Proposed Survey



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- Peddie
- Idutywa
- Stutterheim
- Cholumna

Preliminary Survey results:

Qualitative analysis



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- 93 percent said they have opened accounts after receiving some form of financial literacy training. *“... if you don’t have someone to talk to you about these things, how do you know what to do ... banks and schools are helping us understand better”*, female respondent from Peddie.
- knowledge transfer from school children to parents have been rated highly
- about 62% cited the distance to the nearest bank as a discouragement. The cost for taxi fare, the danger for thieves and time waiting in a queue,

- about 30% indicate that even though they have managed to open bank accounts, managing and sustaining them is a great challenge- bank fees
- *“The banks in South Africa have become a luxury and a thing for the well off...”* unemployed youth (Male) respondent in Idutywa community.
- about 70% indicated that they do not trust banks can handle their accounts well without them getting banks statements from the bank (they are against mobile banking, despite acknowledging its usefulness)
- there is a belief that services like e-wallet have enabled many to use banking services without having the hustles of opening accounts with a bank. Such individuals are financially included, but it may be technical impossible to account for such financial inclusion.

Measurement issues



- Dormant accounts- how to account for these
- E-wallet- can we include this
- ...

Policy Recommendations and Conclusion



- paper's aim was to assess how literacy levels relate and impact on access to banks in South Africa, focusing on Eastern Cape Province
 - level of literacy is significantly positively related to access to bank by individuals
 - Africans lag behind with regard to access to banks in South Africa.
 - this points to a rich niche market for banks in South Africa in the form of the many unbanked rural populace
 - the measure for financial inclusion has its weakness exposed here; - actually there is more measurement exclusion rather than financial exclusion in South Africa
 - However, the inclusiveness that is available does not warranty access to loans, for start-up capital (for example).
 - The reported results should however be interpreted with great care, as bank dormancy was not catered for in our analysis. Also it is imperative to note that it is now five years since the NIDS survey was conducted (second wave recently released may present a platform for comparisons over time) and thus there could be variations with the current status quo, given some stepped up efforts by banks to educate the unbanked population.

